

c) REMARKS

The claims are 41, 42 and 45-48 with claims 41, 42, 45 and 47 being independent. Claims 45-48 have been revised to address informalities as to their form. Claims 45 and 47 were amended to better define operating steps without relying on structural elements to further define the method.

The independent claims were amended pursuant to page 20, lines 4-19 to include a plurality of slots in the waveguide unit. As noted on page 33, undue heating of the throat portion 21 is best avoided due to the possibility of choking therein making it difficult to provide the desired gas flow rate. The plurality of slots in the waveguide provides better control of heating in the nozzle and more uniform and efficient excitation of laser gas.

Claims 41 and 42 were rejected as obvious over Krasnov '762 in view of Hagiwara '210 and Choo '579 and, optionally, Ando '805. Claims 45-48 were rejected as obvious over Hagiwara '210 in view of Krasnov '762, Choo '579 and, optionally, Ando '805. The grounds of rejection are respectfully traversed.

Krasnov '762 does not use microwaves for excitation of laser gas. Krasnov, instead, generates a laser by RF excitation at 2.03 - 10.6 mKHz., column 3, lines 7-9. The high frequency plasma which excites the laser medium is hard to control. Hence, in Krasnov there is no disclosure of a waveguide unit having a plurality of slots for guiding microwaves into the gas supply path structure or the benefits thereof. The defects of Krasnov are not remedied by Hagiwara '210.

Hagiwara '210 discloses exposure apparatus using a laser as the light source. However, Hagiwara fails to teach use of microwaves emanating from a plurality of slots for excitation of laser gas or the benefits thereof. Therefore, the combination of Krasnov and Hagiwara fails to raise a prima facie case of obviousness.

Ando fails to teach use of microwaves emanating from a plurality of slots to excite laser gas. Choo fails to teach guiding microwaves via a plurality of slots from a waveguide into the gas supply to generate illumination light by exciting laser gas.

None of the cited references as noted above teaches or suggests employing a slotted waveguide.

It is respectfully requested reconsideration be given, the amendment be entered, the claims be allowed and the case passed to issue.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



Attorney for Applicants

Registration No. 24947

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200